Department of Commerce • National Oceanic & Atmospheric Administration • National Weather Service

### NATIONAL WEATHER SERVICE INSTRUCTION 10-101 NOVEMBER 11 2003

Operations and Services NWS Requirements NWSPD 10-1

**CHANGE MANAGEMENT PROCESS** 

**NOTICE:** This publication is available at: <a href="http://www.nws.noaa.gov/directives/">http://www.nws.noaa.gov/directives/</a>

**OPR:** OS12 (M.Fairbanks) **Certified by:** OS1 (J.Lee)

Type of Issuance: Initial.

**SUMMARY OF REVISIONS:** Supercedes Weather Service Operations Manual (WSOM) Chapter A-21, Appendix B, "NWS Configuration Management for Operational Systems, Data Review Group Terms of Reference", Issuance 92-01, dated April 24, 1992.

Signed by October 28, 2003
egory A. Mandt Date

Gregory A. Mandt Director, Office of Climate, Water, and Weather Services

**Page** 

## **NWS Change Management Process**

1.	Introduction	2
2.	Purpose	2
3.	CMP Framework	2
	3.1 Identification and Submission of Need	
	3.2 Requirements Validation	
	3.3 Submission of Change Request	
	3.3.1 NWS Change Request	
	3.4 Database, Dissemination, and Review	
	3.4.1 Standard Reviews	
	3.4.2 Fast Track Changes	
	3.4.3 Expedited Approvals	
	3.5 Solution Development and Identification of Resources	
	3.6 Adjudication	
	3.7 Implementation	
		-
Ap	pendices	
	A. Systems Under NWS Change Management A-	1
	B. Acronyms	
	C. RC Form Template and Instructions	
	C. RC Politi Tempiate and instructionsC-	1
Ma	Introduction: This directive gives an overview of the framework, functions, criteria, and anizational accountability for each phase of the National Weather Service (NWS) Change nagement Process (CMP). This directive implements Policy Directive (10-1), NWS quirements.	i
sys	<u>Purpose</u> : Provides a process that ensures an orderly and trackable means for effecting ange to operational NWS Systems under change management. Appendix A lists all of the tems currently under NWS change management. Change Management applies technical and ministrative direction to control changes, record and report change processing, and verify	

3. <u>CMP Framework</u>: The NWS CMP framework of repeatable functional steps consists of the seven functional phases listed below:

compliance with established requirements. The change request provides the vehicle for this

- 1. Identification and Submission of Need
- 2. Requirement Validation

purpose.

Table of Contents:

- 3. Submission of Change Request
- 4. Database, Dissemination, and Review
- 5. Development of Solution and Identification of Resources
- 6. Adjudication and Notification
- 7. Implementation

Each NWS program and project under change management must comply with this instruction. A change request is used when a need reflects changes to a system under an existing requirement. Use the Operations and Service Improvement process to establish a new requirement.

- 3.1 <u>Identification and Submission of Need:</u> An operational need is a desired outcome. An identified need is submitted via the web-based Needs Input Form, in accordance with the Operations and Service Improvement process. The Office of Climate Water and Weather Services (OCWWS) is responsible for tracking the needs. An identified need is translated into a requirement via a joint effort between (OCWWS), the user, and affected service branches in accordance with the Operations and Service Improvement process.
- 3.2 <u>Requirement Validation</u>: As described in the Operations and Service Improvement process, the requirement is validated by the appropriate authority/requirement owner. Service requirements are validated by the affected service branches/divisions. System level requirements are validated by the associated program authority.
- 3.3 <u>Submission of Change Request</u>: Once a requirement is established, a change request is submitted. The requirement translates into various aspects related to the change request. A change request is prepared and submitted to the OCWWS via the appropriate submitting authority. The submitting authority can be either the Office Director, Regional Director, Program Manager or designee. The submitted change request references the requirement. Submissions are sent in electronic (softcopy) form to mailbox *NWSRC@noaa.gov*.
- 3.3.1 NWS Change Request: The NWS standard for submission of a change request is the Request for Change (RC) NWS Form 1001 (reference Appendix B, RC Form Template and Instructions). The RC NWS Form 1001 is located at www.nws.noaa.gov/oso/oso1/oso112. The RC form consists of three parts (Part A, Part B, and Part C). Any additional information, diagrams, graphs, or drawings become attachments to the RC. The attachments expand on items listed, and provide any additional technical information needed. The submitter is responsible for preparing and coordinating the RC with the "sponsoring office" and/or Configuration Control Board (CCB) representative, and ensuring all necessary parts of the RC are completed prior to formal submission. The change analyst will assist the submitter if needed.

Part A provides a description, Data Products supplement, and a decision block for the RC. This section describes the program(s) affected, the scope of the RC, the statement of (or reference to) the requirement, the problem or deficiency of the existing system, the solution(s), and the justification for the change. Part A tracks the decision of the various boards which review and approve the RC. The Data Products Supplement details the information for Data Product

submission. If Data Products are not used in the RC, the supplement does not need to be completed.

Part B provides a description of the Physical Item and Document Impact Matrix Supplement, Funding Information, and Supporting Information and Schedules. The Matrix supplement is required prior to the creation of Engineering Modification Notes and Software Release Notes. Funding information covers funding cycles, and total cost. Supporting Information and Schedules enumerate the time constraints needed to be addressed during system life cycle changes.

Part C details implementation documents required and implementation activities.

Multi-agency programs may submit Requests for Change (RC), Configuration Change Request (CCR), Engineering Change Proposals (ECP), or Preliminary Engineering Change Proposals (PECP) via an established notification and review system for the particular programs.

3.4 <u>Database</u>, <u>Dissemination</u>, and <u>Review</u>: Once a change request is received by OCWWS, the change request is assigned to a Change Management analyst for evaluation. An initial review by the change management analyst ensures that all entry items needed on the change request are completed. The change management analyst reviews the material for administrative and technical merit, and enters it into the Change Management Database and assigns a tracking number. The change management analyst prepares the change request package for formal review. Included in the package is the change request form, and any additional attachments and comments.

The change management analyst disseminates the change request to all appropriate focal points and other involved parties for review and comment. The focal points include representatives from NWS Headquarters, Regional Headquarters, National Centers, and other agencies, if program appropriate. The change management analyst is responsible for addressing issues or comments and coordinating the resolution of issues. Reviews are conducted at the following levels as required or appropriate:

- 1. Standard Reviews
- 2. Fast Track Changes
- 3. Expedited Approvals
- 3.4.1 <u>Standard Reviews</u>: All focal points are responsible for providing a review fully staffed through their office and providing appropriate comment and recommendation. Interested parties are given an opportunity to review and comment. Final decision is made by consensus.

The standard review and adjudication period is thirty days. Some change requests may take longer if more information is needed or issues must be resolved.

3.4.2 Fast Track Changes: Fast Track RCs are those which follow a fast track approval

process, whereby the approval may be granted by the document/ requirements owner if all of the necessary criteria are met. Fast Track refers to the approval process and not the time required for implementation. The four criteria which must be met to be a Fast Track Change are:

- 1. No new requirement
- 2. The solution is identified
- 3. All necessary resources are available
- 4. All required coordination is completed or underway
- 3.4.3 <u>Expedited Approvals</u>: Expedited Approval disseminates the RC to the focal points and requires a limited time for response. The criteria which must be met for Expedited Approval are: short timeliness issues and/or the change affects NWS mission for protection of life and property.
- 3.5 <u>Solution Development and Identification of Resources</u>: A critical portion of the change request involves identification of solution(s) and allocation of resources. For change requests, the steps identified in NWSRC Form 1001 Part C (Change and Implementation Activities) must be identified prior to final change request adjudication.
- 3.6 <u>Adjudication and Notification</u>: The appropriate authority/board adjudicates the change request. There are various levels of authorities/boards including the program, the Configuration Control Board (CCB), the Program Management Committee (PMC), and the NWS Corporate Board. Change requests will be referred to the next higher level of authorities/boards if:
  - 1. The proposed change reaches a certain cost threshold, (thresholds vary according to program),
  - 2. The proposed change has policy implications beyond the scope of the CCB, and/or
  - 3. Consensus decision cannot be reached regarding a proposed change.

Upon completion of the decision-making activity, the change management analyst notifies the user/submitter and other appropriate authorities of the conclusion. The final decision is made by consensus. If a consensus can not be obtained, issues are elevated to a next higher level authority or NWS Corporate Board.

3.7 <u>Implementation</u>: An approved change is authorized for implementation. Implementation may be broken down into specific milestones and milestone verification steps. Such include the development of modification or implementation notes, drawings and documentation updates, procurement of products and services required, and update of Configuration Management Database and related documents. Once all phases of the milestones are completed, the change request becomes fully implemented and is thereby closed. The new configuration(s) become part of the baseline.

# **APPENDIX A - Systems Under NWS Change Management**

Automated Surface Observing System (ASOS)

Advanced Weather Interactive Processing System (AWIPS)

Change of Operations

Cooperative Station Service Accountability (CSSA)

Data Products

NOAA Weather Radio Console Replacement System (NWR CRS)

Radiosonde Replacement System (RRS)

Next Generation Weather Radar (NEXRAD)

# APPENDIX B - Acronyms

CCB	Configuration Control Board
CCR	Configuration Change Request
ECP	Engineering Change Proposal
OCMP	Operational Change Management Process
OCWWS	Office of Climate, Water, and Weather Services
PECP	Preliminary Engineering Change Proposal
PMC	Program Management Committee
RC	Request for Change
RCMB	Requirements and Change Management Branch

APPENDIX C - RC Form Template and Instructions

	N PA	1A. DATE SUBMITTED										
									1B. DATE RECEIVED			
	days from date s	ubmitted	l. Addres						C as possible. If there is no specifi 13-1373. Submit change requests			
2. ORIGINATOR OFFICE	G AUTH		4. COGN Name: Routing ( Phone:		FECHNICAL IND	IVIDU	AL	5. ORIGINATOR TRACKING N	5. ORIGINATOR TRACKING NUMBER			
6. SYSTEMS AFFECT	TED BY CHANGE								7. WSH TRACKING NUMBER	7A. REV		
☐ DATA PROD	DUCTS		OTHER	(specify)						LEVEL		
☐ ASOS	AWIPS		NEXRA	D		RRS		CRS				
8. TITLE OF CHANGE									9. OPERATIONAL REQUIREM DOCUMENT IDENTIFIER	ENTS		
10. CATEGORY OF C	CHANGE						11. C	CLASS OF C	CHANGE			
☐ RC	PECP		ECP					CLASS I	CLASS II			
12. TYPE OF CHANC	3E											
	TATION ONLY		HARDW	/ARE		SOFTWARE		DATA				
13. SITES AFFECTED	)											
14. STATEMENT OF	REQUIREMENT,	PROBL	EM, OR D	DEFICIENC	CY OF E	XISTING SYSTE	ΞM					
15. KNOWN OR PRO	POSED SOLUTION	ON										
16. ALTERNATE SOL	UTIONS											
17. REQUIRED CHANGE DATE	18. RATIONALE	FOR R	EQUIRED	) CHANGE	DATE		19. P	19. PRIORITY				
								ROUTINE	☐ URGENT ☐ EM	ERGENCY		
	DRG/CCB/PMC/CMB DECISION											
20. DECISION AUTHO	ORITY LEVEL		FAST T	RACK		CCB LEVEL O	NLY	□ P	MC or NWS CMB DECISION REC	QUIRED		
21. CCB LEVEL DECI	SION		APPRO	VED		DISAPPROVE	D	SIGNATU	RE			
☐ RECOMMEND APPROVAL								DATE SIG	GNED			
22. PMC OR NWS CN	AB DECISION	FOF	R USE ON	ILY WHEN	I PMC o	r NWS CMB DE	CISION	N REQUIRE SIGNATU				
22. FIVIO OR INVIO UN	ND DEGISION		APPRO	VED		DISAPPROVE	D	SIGNATU	INCIDATE			

NWSRC Form 1001 (Rev A, 12/15/02)

Part A - Page 1 (Cover Sheet)

NWS CHANGE FORM PART A - DATA PRODUCTS SUPPLEMENT									1. ORIGINATOR TRACKING NUMBER				
This information is required for Data Products submissions.									2. WSH TRACKING NUMBER	2A. REV LEVEL			
3. NODE ID	4. AWI	PS ID	5. WMO HEADER				6. ADD	7. SEAS	8. CHAR PER MSG	9. FREQUENCY	10. NWSTG DISTR	NWWSONLY	
	NNNXXX REV		REV Y/N DEL					11. PRIME UPLINK	12. B/U UPLINK				
		FOR MI	ETAR CH	HANGES O	NLY				ERNAL NWS	18. PRODUCT SO	URCE	19. AWIPS DATA TYP	Ē
13. COMMS ID	14. N. LATITUDE 15. W. LONGITUDE		16. ELEV (M)	USE ONLY									
	DEG	MIN	SEC	DEG	MIN	SEC		20. NOTIFICATION		A. CHANGE NOTIC NUMBER	B. EFFECTIVE DATE	C. ISSUE DATE	
								AWIPS					
								EMWIN					
								NWWS					

NWSRC Form 1001 (Rev A, 12/15/02)

Part A - Page 2 (Data Products Supplement)

NWS CHANGE FORM PART B - FUNDING AND SUPPORT	1. ORIGINATOR TRACKING NUMBER							
All RC/ECP submissions must also address the following information. At referencing each applicable subject.	2. WSH TRACKING NUMBER	2A. REV LEVEL						
FUNDING INFORMATION	SOURCE OF FUNDING	COST DATA						
3A. DEVELOPMENT COSTS		3B.	3C. \$					
4A. OPERATIONAL TEST AND EVALUATION COSTS		4B.	4C. \$					
5A. PRODUCTION COSTS		5B.	5C. \$					
6A. COMMUNICATIONS SERVICE/CIRCUITS COSTS		6B.	6C. \$					
7A. IMPLEMENTATION SUPPORT COSTS		7B.	7C. \$					
8A. LIFE CYCLE SUPPORT COSTS		8B.	8C. \$					
9A. CCB COST EVALUATION  NWS COST \$ FAA COST \$ DOD CO	OST \$ OTHER AGENCY (SPECIFY)	OST \$  9B. TOTAL COST \$						
	RMATION AND SCHEDULES							
10. DEVELOPMENT STATUS/SCHEDULE	11. PROCUREMENT STATUS/ SCHE	DULE						
12. IMPLEMENTATION/RETROFIT STATUS/SCHEDULE	13. FACILITY INFORMATION							
14. COMMUNICATIONS RESOURCES TO BE INSTALLED	15. COMMUNICATIONS RESOURCE	S TO BE REMOVED						
16. REQUIRED CLEARANCES, WAIVERS, AND LICENSES	17. COORDINATION OF CHANGE W	TH OTHER CHANGES						
18. PHYSICAL ITEMS AND DOCUMENTS AFFECTED								
20. LOGISTICS IMPACTS								
22. ADDITIONAL MAJOR CHANGE ACTIVITIES								

NWSRC Form 1001 (Rev A, 12/15/02)

Part B - Page 1 (Funding and Support Activities)

PART	B - PHYSICAL ITEM	1. ORIGINATOR TRACKING NUMBER					
This information is	s required prior to publication o	2. WSH TRACKING NUMBER	2A. REV LEVEL				
			PART AND SOFTWA	RE IDENTIFICATION			
3. ITEM TYPE: HARDWARE	4. ITEM NAME AND REFERENCE	5. ADD REMOVE	6. OLD PART OR SOFTWARE V	/ERSION	7. NEW PART OR SOFTWARE VERSION		
SOFTWARE	DESIGNATOR	REPLACE MODIFY	A. PART NUMBER OR SOFTWARE VERSION	B. SERIAL NUMBER OR LOT	A. PART NUMBER OR SOFTWARE VERSION	B. SERIAL NUMBER OR LOT	
		_					
			DOCUMENTATION	N IDENTIFICATION			
8. DOCUMENT TYPE	9. DOCUMENT TITLE	10. ADD REMOVE REPLACE	11. OLD DOCUMENT		12. NEW DOCUMENT		
		MODIFY	A. IDENTIFIER B. REVISION IDENTIFIER		A. IDENTIFIER	B. REVISION IDENTIFIER	
					1	1	

NWSRC Form 1001 (Rev A, 12/15/02)

Part B - Page 2 (Physical Item and Document Impact Matrix Supplement)

NWS CHANGE FORM PART C - CHANGE AND IMPLEMENTATION A	1. ORIGINATOR TRACKING NUMBER				
Submitters should propose implementation actions; WSH will assist with and sup statements when necessary.	2. WSH TR NUMBER	ACKING	2A REV LEVEL		
3. IMPLEMENTATION DOCUMENTS REQUIRED					
Engineering Modification Note Software Release Notes	Other Do	cument (S <sub>l</sub>	pecify)		
ADDITIONAL IMPLEMENTATIO	N INSTRUCTIONS				
4. IMPLEMENTATION ACTIVITY REQUIRED	5. REQUIRED COMPLETION DATE	6. RESP PERSOI OFFICE	ONSIBLE N AND		MENT OR REQUIRED TO OMPLETION

NWSRC Form 1001 (Rev A, 12/15/02)

Part C - Page 1 (Change and Implementation Activities)

### **Instructions**

Provide all of the following information that applies to your change request. If a block in not applicable, leave it blank. If RC does not include data products changes, delete Part A - Page 2 prior to submitting the change request. If not needed, Delete Part B - Page 2 prior to submitting the change request. In case of formatting problems, contact the Requirements and Change Management Branch (W/OS12) at (301) 713-1373.

## Part A, Page 1

- 1A. DATE SUBMITTED. Date RC submitted email soft copy to the <a href="https://www.ncan.gov"><u>NWSRC@noaa.gov</u></a> mailbox. For Data Review Group change requests email soft copy to DRGCM@noaa.gov.
- 1B. DATE RECEIVED. For Weather Service Headquarters (WSH) use to indicate the date the soft copy arrived at the NWSRC mailbox.
- 2. ORIGINATOR OFFICE. Office of authorized submitter, e.g., NWS, FAA, ERH.
- 3. SUBMITTING AUTHORITY. Name and routing code of authorized submitter usually the office director or equivalent or person formally delegated by office director or equivalent.
- 4. COGNIZANT TECHNICAL INDIVIDUAL. Name, routing code, and telephone number of person to be contacted by WSH offices familiar with the requirement and proposed solution.
- 5. ORIGINATOR TRACKING NUMBER. Originator's tracking number using local numbering system.
- 6. SYSTEMS AFFECTED BY CHANGE. Check off boxes for system(s) affected; if data products box checked, complete Data Products Supplement, Part A, Page 2; if other, specify system(s). For best results in checking boxes, place curser to the left of the box and type an "x" or "X" to replace the box. If the box remains visible, delete it.
- 7. WSH TRACKING NUMBER. For WSH use. Number automatically assigned by Change Management Database.
- 7A. REV LEVEL. For WSH use to indicate revisions.
- 8. TITLE OF CHANGE. Concise descriptive title of change; include location(s), if applicable.
- 9. OPERATIONAL REQUIREMENTS DOCUMENT IDENTIFIER. For WSH use to indicate the Operational Requirements Document (ORD) appropriate for the required change. For new requirements, submitters should identify the ORD in Block 14.
- 10. CATEGORY OF CHANGE. Check off boxes for Request for Change (RC), Preliminary Engineering Change Proposal (PECP), or Engineering Change Proposal (ECP).
- 11. CLASS OF CHANGE. Check off box for Class I or Class II change. Class I changes correct deficiencies, respond to changing requirements, improve effectiveness, or reduce life cycle costs; and typically involve changes to design or software. Class II changes are not related to improvements, but instead replace obsolete components; while preserving the same form, fit, and function of the replaced components. Most changes related to user requirements are Class I changes.

### Instructions

- 12. TYPE OF CHANGE. Check off boxes for type of change; any combination of hardware, software, or data can be selected; assume documentation always applies and check documentation only box when there is no physical hardware or software change.
- 13. SITES AFFECTED. List of site(s) affected. If change affects multiple sites; attach Part B, Page 2. Include and specify the station or communications identifier. When referring to component information, include part and serial numbers.
- 14. STATEMENT OF REQUIREMENT, PROBLEM, OR DEFICIENCY OF EXISTING SYSTEM. Narrative description of problem(s); supporting information for the basis for change. For new requirements, submitters should identify the applicable ORD.
- 15. KNOWN OR PROPOSED SOLUTION. Submitter's recommended solution; describe how solution would be accomplished and new features; include advantages over alternate solution(s); if RC is for a data products change, describe new products or changes to existing products.
- 16. ALTERNATE SOLUTIONS. Potential alternate solutions(s); indicate if no alternative solutions are possible or practical.
- 17. REQUIRED CHANGE DATE. Date change needed; if no particular event is driving the change date, enter a date 60 days after submission date or a date that would allow a reasonable time to complete the change.
- 18. RATIONALE FOR REQUIRED CHANGE DATE. Event driving the change; rationale for requesting any lead time (date prior to event); description of urgency.
- 19. PRIORITY. Check off box for appropriate priority consistent with the established priority system for the system affected.
- 20-22. CCB/PMC/CMB DECISION. For WSH use to indicate decision.

# Part A, Page 2 - Data Products Supplement (Include only for data products changes; all others, delete page.)

- 1. ORIGINATOR TRACKING NUMBER. Originator's tracking number using local numbering system.
- 2. WSH TRACKING NUMBER. For WSH use.
- 2A. REV LEVEL. For WSH use to indicate revisions.
- 3. NODE ID. Indicates the originating station ID, CCC.
- 4. AWIPS ID. NNN is the three-character AWIPS product category; XXX is the one- to three-character AWIPS product designator.
- 5. WMO HEADER. Corresponding WMO abbreviated heading.

### **Instructions**

- 6. ADD/REV/DEL. Indicates if product is to be added, revised, or deleted.
- 7. SEAS Y/N. Indicates if product is seasonal (yes or no).
- 8. CHAR PER MSG. Number of characters per message for added products or revised products, when number of characters changes.
- 9. FREQUENCY. Number of messages each hour, day, or month; and transmission times, if applicable.
- 10. NWSTG DISTR. NWS Telecommunications Gateway distribution for products.
- 11. NWWS PRIME UPLINK. Three-letter communications identifier for the primary NWWS data transmission uplink field site (CCC).
- 12. NWWS BU UPLINK. Three-letter communications identifier for the backup (NWWS) data transmission uplink field site (CCC).

### For METAR Changes:

- 13. COMMS ID. Three-letter communications identifier for field site generating product.
- 14. N. LATITUDE. Latitude (North) in degrees, minutes, and seconds for field site generating the product.
- 15. W. LONGITUDE. Longitude (WEST) in degrees, minutes, and seconds for field site generating the product.
- 16. ELEV(M). Elevation to nearest tenth of a meter for the field site generating the product.
- 17. INTERNAL NWS USE ONLY.
- 18. PRODUCT SOURCE. Product source, e.g. AFOS, NCEP, NESDIS.
- 19. AWIPS DATA TYPE. Graphics, Grids, BUFR, Text, or Satellite (for AWIPS changes).
- 20. CHANGE NOTICE BLOCKS. For WSH use.

### Part B, Page 1

- 1. ORIGINATOR TRACKING NUMBER. Originator's tracking number, if using local numbering system.
- 2. WSH TRACKING NUMBER. For WSH use.
- 2A. REV LEVEL. For WSH use to indicate revisions.
- 3A. DEVELOPMENT COSTS. Description of development required and sources of development effort.

### **Instructions**

- 3B. SOURCE OF FUNDING. Office or outside agency to provide funding for each category; designate MOA, if applicable.
- 3C. COST DATA. Cost of category; include proportional split of funding among agencies, if applicable.
- 4A. OPERATIONAL TEST AND EVALUATION COSTS. Description of OT&E required and sources of testing and evaluation effort.
- 4B. SOURCE OF FUNDING. Office or outside agency to provide funding for each category; designate MOA, if applicable.
- 4C. COST DATA. Cost of category; include proportional split of funding among agencies, if applicable.
- 5. PRODUCTION COSTS. Description of acquisition method for acquisition, kit proofing, spares, delivery, and documentation.
- 5B. SOURCE OF FUNDING. Office or outside agency to provide funding for each category; designate MOA, if applicable.
- 5C. COST DATA. Cost of category; include proportional split of funding among agencies, if applicable.
- 6. COMMUNICATIONS SERVICE/CIRCUITS COSTS. Description of new or changed communications required.
- 6B. SOURCE OF FUNDING. Office or outside agency to provide funding for each category; designate MOA, if applicable.
- 6C. COST DATA. Cost of category; include proportional split of funding among agencies, if applicable.
- 7. IMPLEMENTATION SUPPORT COSTS. Description of labor efforts (travel, installation, and administrative costs).
- 7B. SOURCE OF FUNDING. Office or outside agency to provide funding for each category; designate MOA, if applicable.
- 7C. COST DATA. Cost of category; include proportional split of funding among agencies, if applicable.
- 8. LIFE CYCLE COSTS. Description of support services, equipment, and documentation costs required to maintain the product over its lifetime. This category may also include the costs of disposal at the end of its life cycle. (Do not include communications service/circuits.)
- 8B. SOURCE OF FUNDING. Office or outside agency to provide funding for each category; designate MOA, if applicable.
- 8C. COST DATA. Cost of category; include proportional split of funding among agencies, if applicable.

### **Instructions**

- 9A. CCB COST EVALUATION. For programs where costs are split among agencies, the configuration control board or designated analyst will indicate costs to be incurred for each agency.
- 9B. TOTAL COST. Estimated total cost of change; equal to the sum of all costs.
- 10. DEVELOPMENT STATUS/SCHEDULE. Major milestone dates such as Start, Beta Test, and OT&E of any required development.
- 11. PRODUCTION STATUS/SCHEDULE. Major milestone dates such as Solicitation, Contract Start Date, Delivery Date, Kit Proofing, etc., of any required procurement.
- 12. IMPLEMENTATION/RETROFIT SCHEDULE. Sequential implementation/retrofit plan and dates, when available.
- 13. FACILITY INFORMATION. Detailed facility information. (Describe and provide drawings/plans of any relocated or newly installed sensors, racks, workstations, etc.)
- 14. COMMUNICATIONS INSTALLED. Detailed communications additions and modifications; and entity responsible for ordering circuits; for multiple circuits and responsibilities, use Part B, Page 2.
- 15. COMMUNICATIONS RESOURCES TO BE REMOVED. Detailed communications terminations; and entity responsible for ordering terminations; for multiple circuits and responsibilities, use Part B, Page 2.
- 16. REQUIRED CLEARANCES, WAIVERS, AND LICENSES. Description of all formal permits obtained or to be obtained, and responsible entity. This includes software licenses.
- 17. COORDINATION OF CHANGES WITH OTHER CHANGES. List of related pending changes and coordination requirements.
- 18. PHYSICAL ITEMS AND DOCUMENTS AFFECTED. Affected physical items and documents; for multiple items and documents, attach Part B, Page 2. Specify if escrow packages are affected.
- 19. STAFF RESOURCE IMPACTS. Description of the impact on existing skills and workload of maintainers, operators, and managers.
- 20. LOGISTICS IMPACTS. Description of impact on facilities, maintenance, training, and support equipment.
- 21. OPERATIONAL IMPACTS. Description of impact on operations.
- 22. ADDITIONAL MAJOR CHANGE ACTIVITIES. Description of activities required to implement change; responsible entity; staff hours required; and estimated labor costs, if applicable.

### Part B, Page 2

1. ORIGINATOR TRACKING NUMBER. Originator's tracking number using local numbering system.

- 2. WSH TRACKING NUMBER. For WSH use.
- 2A. REV LEVEL. For WSH use to indicate revisions.
- 3. ITEM TYPE: HARDWARE, SOFTWARE. Line item type, e.g., hardware or software.
- 4. ITEM NAME AND REFERENCE DESIGNATOR. Line item name and appropriate reference designator.
- 5. REMOVE, REPLACE, MODIFY. Disposition of the physical items, i.e., remove, replace, or modify the item.
- 6. OLD PART OR SOFTWARE VERSION. Superseded or replaced part or software version.
- 6A. PART NUMBER OR SOFTWARE VERSION. Identification number of physical items or software versions to be replaced. When applicable, identify part numbers or original equipment manufacturer part numbers for commercial-off-the-shelf parts.
- 6B. SERIAL NUMBER OR LOT.
- 7. NEW PART NUMBER OR SOFTWARE VERSION. New replacement item or software version.
- 7A. PART NUMBER OR SOFTWARE VERSION. Identification number of new replacement physical items or software versions. When applicable, identify part numbers or original equipment manufacturer part numbers for commercial-off-the-shelf parts.
- 7B. SERIAL NUMBER OR LOT. Serial number(s), range of serial numbers, or lot number of the new replacement physical items.
- 8. DOCUMENT TYPE. Type of document affected, e.g., drawing, schematic, modification note, site table, or escrow package.
- 9. DOCUMENT TITLE. Name of document affected by the change.
- 10. REMOVE, REPLACE, MODIFY. Disposition of the document, i.e., remove, replace, or modify the document.
- 11. OLD DOCUMENT. Superseded document.
- 11A. IDENTIFIER. Number or name of document superseded or modified.
- 11B. REVISION IDENTIFIER. Revision number of superseded document, if applicable.
- 12. NEW DOCUMENT. New replacement document.

### **Instructions**

- 12A. IDENTIFIER. Number or name of new replacement document.
- 12B. REVISION IDENTIFIER. Revision number of new replacement document, if applicable.

### Part C

Part C is the implementation portion of the change request and is a responsibility of WSH. In Part A and Part B, submitters should have provided sufficient information needed to implement the change, but may indicate proposed actions on this page. Submitters should include regional and local responsibilities, and they may also include suggested activities to be accomplished and complete any portion of Part C that would assist WSH in creating a complete implementation plan.